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NOTICE OF ALLOWANCE AND FEE(S) DUE

513 7590 12/15/2009 WENDEROTH, LIND & PONACK, L.L.P. 1030 15th Street, N.W., Suite 400 East

Washington, DC 20005-1503

MCCRACKEN, DANIEL				
ART UNIT	PAPER NUMBER			

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/537,151	05/31/2005	Yuichi Fujioka	2005-0703A	6351	

TITLE OF INVENTION: CARBON NANO-FIBROUS ROD, FIBROUS NANOCARBON, AND METHOD AND APPARATUS FOR PRODUCING FIBROUS NANOCARBON

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	03/15/2010

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 1SI. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FIEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax (571)-273-2885

INSTRUCTIONS: This appropriate. All further c indicated unless correcte maintenance fee notificat	form should be used for correspondence includir d below or directed oth ions.	or tran ig the ierwise	smitting the ISSU Patent, advance or in Block 1, by (a							
CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)					Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.					
WENDEROTH 1030 15th Street, Suite 400 East			L.L.P.] 	her State addro	eby certify that thi	s Feets	of Mailing or Transis) Transmittal is being ficient postage for firs ISSUE FEE address I) 273-2885, on the di	deposited with	the United in envelope g facsimile low.
Washington, DC	20005-1503			[(Dep	ositor's name)
										(Signature)
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APPLICATION NO.	FILING DATE			FIRST NAMED INVENT	OR		ATTO	RNEY DOCKET NO.	CONFIRMATI	ON NO.
10/537,151	05/31/2005			Yuichi Fujioka				2005-0703A	6351	
TITLE OF INVENTION FIBROUS NANOCARBO	ON				_					
APPLN, TYPE	SMALL ENTITY	IS	SUE FEE DUE	PUBLICATION FEE D	UE	PREV. PAID ISSUE	FEE	TOTAL FEE(S) DUE	DATE I	DUE
nonprovisional	NO		\$1510	\$300		\$0		\$1810	03/15/2	2010
EXAMI	NER		ART UNIT	CLASS-SUBCLASS						
MCCRACKE	N, DANIEL		I793	423-447200						
"Fee Address" indi- PTO/SB/47; Rev 03-02 Number is required. 3. ASSIGNEE NAME AN	ess an assignee is ident i in 37 CFR 3.II. Comp	" Indica ed. Use	ation form e of a Customer E PRINTED ON		ingle or a attor be p typ e pa	ely, firm (having as a gent) and the name news or agents. If i orinted. e) tent. If an assignous issignment.	memb s of up no nam	er a 2	cument has bee	
Please check the appropri	ate assignee category or	catego	ories (will not be pr	inted on the patent):		Individual 🔲 Co	rporati	on or other private gro	up entity 🗖 G	overnment
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	SMALL ENTITY state	ıs. See	37 CFR 1.27.	☐ b. Applicant is no						
NOTE: The Issue Fee and interest as shown by the re	l Publication Fee (if req ecords of the United Sta	uired) v tes Pat	will not be accepted ent and Trademark	d from anyone other the Office.	an th	e applicant; a regi	stered a	ittorney or agent; or th	e assignee or ot	her party in
Authorized Signature						Date				_
Typed or printed name						Registration N				
This collection of informs an application. Confident submitting the completed this form and/or suggestic Box 1450, Alexandria, Vi Alexandria, Virginia 2231	ation is required by 37 C iality is governed by 35 application form to the ons for reducing this but reginia 22313-1450. DC (3-1450.	FR 1.3 U.S.C. USPT rden, sl O NOT	11. The informatic . 122 and 37 CFR O. Time will vary hould be sent to the SEND FEES OR	on is required to obtain 1.14. This collection is depending upon the ir e Chief Information Of COMPLETED FORMS	or re esti divi fice TC	etain a benefit by the mated to take 12 m dual case. Any co r, U.S. Patent and THIS ADDRESS	ne publ ninutes mment Fraden . SENI	ic which is to file (and to complete, includin s on the amount of tir ark Office, U.S. Depa D TO: Commissioner I	by the USPTO g gathering, pre g you require t rtment of Comr or Patents, P.O.	to process) paring, and o complete merce, P.O. Box 1450,

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PTOL-85 (Rev. 08/07) Approved for use through 08/31/2010.



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NITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Offic Address: COMMISSIONER FOR PATENTS

P O Box 1450 Alexandria, Virgima 22313-1450 www.uspto.gov

DATE MAILED: 12/15/2009

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.			
10/537,151	05/31/2005	Yuichi Fujioka	2005-0703A	6351			
513	7590 12/15/2009		EXAMINER				
WENDEROTH	, LIND & PONACK	L.L.P.	MCCRACKEN, DANIEL				
1030 15th Street,	N.W.,		ART UNIT	PAPER NUMBER			
Suite 400 East							
Washington, DC 20005-1503							

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 649 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 649 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 (571)-272-4200.

Application No. Applicant(s) 10/537,151 FUJIOKA ET AL. Notice of Allowability Examiner Art Unit DANIEL C. MCCRACKEN 1793 -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308. This communication is responsive to 7/2/2009. The allowed claim(s) is/are 54,56 and 59-111. 3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) \square All b) ☐ Some* c) ☐ None of the: 1. T Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)). * Certified copies not received: _____. Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient. CORRECTED DRAWINGS (as "replacement sheets") must be submitted. (a) Including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached 1) hereto or 2) to Paper No./Mail Date (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d). 6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL. Attachment(s) 1. | Notice of References Cited (PTO-892) 5. Notice of Informal Patent Application 2. Notice of Draftperson's Patent Drawing Review (PTO-948) Interview Summary (PTO-413), Paper No./Mail Date Information Disclosure Statements (PTO/SB/08). 7. X Examiner's Amendment/Comment Paper No./Mail Date 4. T Examiner's Comment Regarding Requirement for Deposit 8. T Examiner's Statement of Reasons for Allowance

/Daniel C. McCracken/

Examiner, Art Unit 1793

of Biological Material

Supervisory Patent Examiner, Art Unit 1793

Other .

/Stanley Silverman/

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Andrew D. St. Clair (58,739) on 10/13/2009.

The application has been amended as follows:

In Claim 63: The fibrous nanocarbon according to claim 59, wherein said carbon nanofibrous rods constituting said carbon nano-fibrous [_] rod cluster are arranged at an arrangement angle of larger than 0 degree but smaller than 20 degrees with respect to an axis perpendicular to a fiber axis extending in said stacking direction, thereby forming a columnar shape.

In Claim 91: The method for producing fibrous nanocarbon according to claim 90, wherein the high velocity flow portion includes a collision portion [is].

In Claim 97: The method for producing fibrous nanocarbon according to claim 96, wherein the apparatus includes a plurality of the first fluidized bed reactors.

Art Unit: 1793

The following is an examiner's statement of reasons for allowance: Upon reconsideration

in light of Applicants arguments, the prior art does not teach the fibrous nanocarbon with the

specificity needed to anticipate or render obvious the claimed invention. While various

morphologies are known (Rodriguez) and fluidized beds have been employed in carbon

nanotube/nanofiber manufacture (Resasco), the prior art did not disclose the fibrous nanocarbon

with the dimensions required and in the conformation required by the claims.

Any comments considered necessary by applicant must be submitted no later than the

payment of the issue fee and, to avoid processing delays, should preferably accompany the issue

fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for

Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DANIEL C. MCCRACKEN whose telephone number is

(571)272-6537. The examiner can normally be reached on Monday through Friday, 9 AM - 6 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stanley S. Silverman can be reached on (571) 272-1358. The fax phone number for

the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated

information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Daniel C. McCracken/ Daniel C. McCracken Examiner, Art Unit 1793

DCM

/Stanley S. Silverman/

SPE. Art Unit 1793